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WORLDWIDE THREAT TO U.S. NAVY  
AND MARINE FORCES, [REDACTED] (U)

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ENCLOSURE ( / )

## SECTION I

### STRATEGIC OVERVIEW (U)

#### A. REGIONAL SECURITY CONSIDERATIONS (U)

##### 1. NATIONAL GOALS (U)

(U) ~~SECRET~~ China wants to evolve into what it terms, "a world class economic and military power" by 2020, and wants to achieve that status in terms of international recognition as well as in its own eyes. Two important factors affect this goal: (1) how its domestic political system evolves and (2) the legal status of Taiwan. The latter could "rejoin" the mainland, maintain the status quo, or seek independence. Alternate scenarios for Chinese domestic politics involve either incremental change toward a more "guided" democracy or a return to a more hard-line ideology. Regardless of the scenario, China's strategic interests are likely to remain constant, but its ability to reach its goals will vary. Another constant in Chinese political thought is the importance of moderating change to preserve internal and external stability.

(U) ~~SECRET~~ China does not perceive any large-scale threat from either global or major regional powers through 2010. Concern over territorial disputes with virtually all its neighbors has spurred China to seek a reduction in tensions along its borders in order to create a stable regional environment conducive to its domestic modernization programs. This does not mean, however, that China will avoid conflicts at all cost, or that it will not be tempted to pressure weaker regional rivals should benefits accrue from such action without detracting from longer term goals. Indeed, China views intra-regional conflicts as the most likely contingencies for the future, and is restructuring its military forces to allow for more rapid, flexible response and preemptive reaction capabilities.

(U) ~~SECRET~~ Since 1980, China's perceptions of a declining Soviet/Russian threat and generally benign

global environment have encouraged it to prioritize economic and industrial development over military expenditures. China believes there is little risk of major conflict through at least 2010. This will allow China time to pursue a foreign policy of peace and independence increasingly focused on economic issues as it concentrates domestic efforts on modernization. Its foreign policy has been, and will remain, nonaligned. China considers good relations with the United States to be vital, yet seeks to counter what it perceives to be U.S. "hegemonic tendencies" in the New World Order.

(U) ~~SECRET~~ Relations between China and other key countries include the following:

- Japan represents a prime source of trade, aid, investment, and technology transfer but is also perceived by China as the greatest potential military threat, especially if Japan acquires nuclear weapons or a power projection capability. Sino-Japanese relations will continue to improve, and there is an impetus toward mutual economic accommodation and stability.
- Russia, in spite of Chinese perceptions of its longer-term military threat potential, is currently enjoying a rapprochement with China. Chinese leadership sees conflict with Russia through 2008 as remote.
- The Koreas remain a lingering concern. China sees peaceful reunification of the two countries as optimal, with crisis containment as a fallback posture.
- Southeast Asia is a factor in China's sphere of influence, making potential Indian encroachment there a prime Chinese concern. Conflict with Vietnam remains the most likely short-term threat.

(U) ~~SECRET~~ The traditional rivalry between India and China has temporarily subsided. Leaders in Beijing and New Delhi are making efforts to forge a new relationship by implementing confidence-building measures on all fronts. The recent rapprochement suggests that both India and China view conflict as

highly unlikely for the next 10 years, even though territorial disputes and the issue of Pakistan remain.

(U) (C) Taiwan, which Beijing views as a wayward province, probably will remain a separate entity, but pressure for reunification will continue, even with the passing of the old guard on both sides of the straits. Reunification by force would prove too costly in military terms, and the economy would suffer because of the potential for the flight of capital and technological know-how and international political condemnation.

(U) (C) Both Macao and Hong Kong will have been reabsorbed by 1999, perhaps retaining much of their political and economic status quo. If Taiwan judges that their reintegration has produced sufficient guarantees for the continuation of a "one country, two systems" formula, then Taiwan too might eventually choose such an option. This decision could take place before 2013, perhaps emerging incrementally as much as a decade earlier. A strong foundation for rapprochement is being built through increased bilateral contacts, and trade and investment links. Whether by political or military means, absorption of Taiwan's financial wealth, industrial base, and production capabilities would eventually yield considerable advantages to China. Aside from political and cultural factors, Taiwan would also benefit from a reduced defense burden and greater ability to exploit economic links to the mainland.

(U) (C) Although there are currently two Chinese entities (China and Taiwan), some fundamental common "national" interests persist. Territorial issues are prime among them. Further, for some armed conflicts—such as with Japan—it is entirely possible that, despite their differences, Taiwan could help shoulder a temporary common defense burden with China. Naturally, a peaceful evolution toward integration would provide the greatest benefit to China, allowing it to increase significantly both its regional standing and its military capabilities.

(U) (C) Of the two main political-economic scenarios possible in China, the more likely depicts a slow, orderly transition toward greater relaxation of central Communist Party control over at least economic life and, to a lesser (and more gradual) degree, political life. Although less likely, a revolutionary "coup" is possible. Should the hard-line faction of the Communist Party seek to reassert its former control, China would suffer great dislocation. Progress would be stifled, precipitating a severe slowdown of economic growth and inviting retaliation from China's trading

partners. Although China would have fewer public funds to budget as a result of the economic slowdown, it could devote a larger percentage to defense, at least in the short-to-mid term.

## 2. PERSPECTIVE (U)

(U) (C) The size of China's military can be misleading. Capabilities still fall short of expectations, even in the minds of China's civilian and military leaders. They have recognized for some time that the mere size of their forces and the willingness to accept great sacrifices of men and territory to attrite the will of a determined enemy would not afford them the best defense. This was further emphasized by the lessons in modern warfare provided by DESERT STORM. China realized modernization was imperative. This has resulted in a change in strategic thinking whereby China will gradually reduce its numbers and create smaller but more effective armed forces. Resulting savings, plus an expanded defense budget, will allow more expenditure on training and technology per soldier and materiel "unit."

(U) (C) Beijing wants to replace its military equipment, much of which is reaching—or has already reached—obsolescence, with state-of-the-art military equipment by 2020. If it is able to do that, the overall capability of its future numerically smaller armed forces will increase dramatically. Achieving that strategic goal depends on three factors:

- The rate of progress among foreign technology leaders;
- Gaining access to foreign innovations or, failing that, indigenous breakthroughs to narrow the capabilities gap that currently exists between world standards and current Chinese technological sophistication; and
- The ability and commitment to afford such improvements.

(U) China's relative isolation from the 1950s through the 1970s—a period that included the disruption and upheaval of the Great Leap Forward and the Great Proletarian Cultural Revolution—followed by turbulence through the mid-1980s make particularly problematical any extrapolation about China's ability to modernize militarily. On the one hand, the Great Proletarian Cultural Revolution destroyed almost a generation of intellectuals; schools were disrupted, colleges and universities were completely shut down. These events resulted in a genuine shortage of qual-

fied personnel in many scientific specialties, in turn affecting both research and production. This in part explains China's failure to make meaningful advances in its efforts to modernize its armed forces during the period.

(U) On the other hand, in March 1985, China codified two major reforms in science and technology. First, China abandoned the Soviet-style, vertical responsibility system of central planning in favor of greater institutional and management flexibility. Second, China discarded much of its xenophobic and nationalistic sensitivities, turning to the industrialized countries for technological and scientific knowledge, cooperation, and investment. China already had been exploiting advanced educational systems worldwide to great effect since the early 1980s (over half of its students return from studies abroad). These efforts have dramatically changed China's technological landscape, creating a new baseline of capability.

### 3. THREAT PERCEPTIONS (U)

(U) A major factor in current East Asian regional geopolitics is the difference between the military budgets of the region's key states. Although totaling less than one percent of its GNP, Japan's military budget is still greater than the combined official military expenditures of China, Taiwan, and South Korea. The weight of this large imbalance will change only slowly. China will continue to see the Russian military presence in the Far East as benign, at least through 2003. Conflict between China and India remains possible, especially if either China or India perceives changes in the other's relative political and/or military advantage that would affect either their spheres of influence or the military balance. China welcomes U.S. East Asian presence (as a guarantor of peace), yet fears and condemns alleged U.S. "hegemonist" initiatives worldwide.

(U) China is concerned about potential Japanese, Russian, and Indian military challenges but still considers them remote possibilities and mainly of longer-term concern. China perceives military challenges by such lesser Southeast Asian states as Vietnam as more likely. The main impetus for Chinese military modernization will remain largely the goals of national survival through deterrence and maintain-

ing prestige through national presence on the regional scene.

(U) Competing South China Sea claims over the Nansha Archipelago (Spratly Islands) remain an irritant to the Chinese. Nonetheless, China seeks to participate in bilateral talks over joint exploitation with all claimants, including Vietnam; however, efforts with the latter appear to be no more than lip service. The other claimants are Taiwan, the Philippines, Malaysia, and Brunei. China's position regarding sovereignty remains unwavering: Chinese interests transcend mere resource potential. The strategic value of the islands is of greater concern as China seeks to consolidate a position of regional primacy. Competing claims could inspire an early test of China's growing power projection capability against a weaker Vietnam.

### B. INTERNAL POLITICAL SITUATION (U)

(U) The major imperative for all internal Chinese political factions is maintaining socio-political stability. Internal pressure for change will grow with the passing of the last of the revolutionary old guard. These leaders, most of whom are in their mid-80s, may not rule through 1998. Two major camps (the guardians of ideological rectitude versus Deng Xiaoping's reformists) continue to solicit disciples. Reformists seeking greater economic and political freedom are currently in the ascendancy and will likely gradually continue to gain over ideologues focused on Communist Party primacy. Deng may be the last "Paramount Leader." Successors of lesser stature will probably be forced to form a collegial leadership and to rule through greater elite consensus rather than fiat. Domestic political evolution probably will not be smooth but will continue to be affected by competing extremes alternately pushing for reform or retrenchment.

(U) Possible, but less likely, alternate scenarios include the two extremes of China rejecting the Party and its ideology in favor of "democracy," or China returning to a more revolutionary strain of leadership. The latter could derail or negate much of the recent economic growth, but military acquisition programs would be easier to justify, if not finance, under such a scheme. Regardless of who rules in China, maintaining stability (law and order) will be the prime motivator and goal.

## C. ECONOMIC OVERVIEW (U)

(u) (c) Politico-economic changes will be spurred by slower population growth, which will allow for greater socio-economic benefits and assuage rising socio-economic expectations, and the success of the dynamic free enterprise system taking root in most of the south's Special Economic Zones (SEZs), which are spearheading GNP growth. Economics remains a controversial doctrinal topic in China. Growing prosperity and rising expectations are becoming part of the socio-political fabric, but unrestrained growth threatens Party primacy. The major economic Achilles heel continues to be uneven growth and volatile inflationary pressure. Controlling inflation while moderating its social impact is imperative and is likely to preoccupy whatever regime is in power.

(U) The economic success of the coastal zones is undeniable, directly benefiting about a fifth of the population. The remainder of the population, almost 900 million mainly rural workers in the interior of the country, is largely unaffected by the positive aspects of this rapid GDP growth, while still subject to inflation's steady erosion of buying power. Most are thought to be either slightly bettering their living standards or keeping pace with inflation. But, almost 400 million Chinese are in fact in economic decline. This has caused serious, but still isolated, political disturbances. Economic relief for this political center of gravity—the peasantry—has become imperative.

(u) (c) Nonetheless, even with the economic downturn caused by the Tiananmen Square massacre of June 1989, the period 1983-1992 yielded a healthy 9% yearly average growth in GNP (1992's real growth rate, adjusted against inflation, is estimated at 12.8%). In spite of fears of the economy becoming "superheated," real GNP growth for 1993 is expected to better last year's record. Real growth rates of 7-8% are likely for the foreseeable future, led by the coastal SEZs' booming growth (24% in 1992). This could eventually free more funds for military development.

(u) (c) Chinese economic statistics have historically been highly unreliable. Using purchasing-power-parity exchange rates (an economic tool quantifying the value of all goods and services produced annually in a country's own currency, rather than converted into U.S. dollar terms), China's 1992 GNP reaches the equivalent of \$2,230 billion. That would compare favorably with Japan's 1992 GNP of \$2,469

billion, placing China as the third largest economy after Japan and the United States, and well on the way to becoming second in the next 2 years. However, if one uses the more traditional (but equally flawed) method of assessing national GNP in pure dollar figures, the 1992 GNP estimate for China plummets to the range of \$450-500 billion. Neither scale is entirely satisfactory. Direct foreign investment provides a different comparative scale, one that reveals foreign business confidence in a country's economic prospects. China will benefit from direct investments worth an estimated \$15-20 billion during 1993, as opposed to a tenth that amount going to India.

(u) (c) China's industrial base has begun modernizing across-the-board, thanks to the boom in joint ventures with foreign industrialists. This is leading to growing technical capabilities, a more skilled labor force, and increased trade contacts abroad. Thanks in large part to the drawing power of its cheap, plentiful, and motivated labor force, China is experiencing a revolution in access to basic foreign industrial know-how through joint ventures. While this mainly applies to civil industrial use, military production should also benefit.

(u) (c) China understands that future development depends on economic ties with Japan, newly industrialized Asian countries, Western Europe, the United States, and Russia. China views Japan as a source of venture capital as well as technological and industrial know-how, with Europe and the United States as potential alternate sources. Russia has also become a source of very cheap finished goods and technology. Russia also accepts partial barter arrangements and trade that appear free of legal and diplomatic encumbrances. Other trading partners, such as the United Kingdom, Germany, France, Italy, and Israel also serve as sources of hard currency and/or industrial techniques.

[REDACTED] we know that a great number bilateral extended exchange visits are taking place between China and the Soviet successor states. This activity—some dealing with pure research—dates from the recent thaw in relations. It has already been bolstered by significant contracts, and by the promise of more purchases. China's industrial infrastructure will also benefit from such exchanges.

(U) (C) [REDACTED] Modernization of industrial capabilities is likely to result from three simultaneous trends. First, as China's industrial infrastructure benefits from the current priority in investments, the Chinese will increasingly be able to upgrade their defense production capabilities to meet military [REDACTED]

[REDACTED] as off-budget special funds are used for expected acquisitions of select military technologies and manufacturing know-how, China's production capabilities should approach state-of-the-art. Third, the more traditional method of technology acquisition through reverse engineering will remain crucial through 2013. Foreign sales of militarily useful equipment to China are likely to continue despite this risk. These trends are mutually reinforcing and will shorten expected timelines for acquiring and fielding more sophisticated military assets.

#### D. MILITARY OVERVIEW (U)

(U) (S) [REDACTED]

[REDACTED] The official defense budget for 1993 is \$6.7 billion, a figure that represents a 100% increase over the announced defense budget for 1988 and at least an acknowledgement that defense spending is on the rise. However, announced budgets represent only a portion of actual defense expenditures. In April 1991, the Chinese senior leadership announced to the Military Commission that a US\$5.18 billion "special fund" had been allocated for supplementary defense acquisitions through 1996. In addition, Chinese military factories are involved in both arms exports and civilian goods production. Profits from civilian pro-

duction in these factories also support military programs. Finally, many programs that the United States considers legitimate defense expenditures—military dependent allowance, military pensions, certain research and development, and expenditures associated with reserve forces—are not part of the announced Chinese military budget. Taking these factors into consideration, China's actual expenditures are probably at least more than twice its announced budget, and potentially as much as four-fold.

(u) Beijing views the post-Cold War period as full of uncertainty, potentially dangerous, and requiring renewed vigilance. Civilian and military leaders have recognized the inadequacies of their armed forces. DESERT STORM reoriented their priorities toward smaller, more professional, and technologically sophisticated mobile fighting forces. The leadership has accepted that China will still not be able to catch up technologically with most highly industrialized states by 2003, as had been anticipated by the "Four Modernizations" campaign in 1978. China will have to rely on increased doctrinal flexibility to meet challenges posed by the full spectrum of possible conflicts, from local war with limited objectives against other regional powers to large-scale war involving massive numbers of forces and vast territory. As with all large bureaucracies, implementing doctrinal change in China takes time, especially during a period of transition when internal consensus is lacking.

(u) In any confrontation with modern foreign forces in the next 10-15 years, China will fall short across-the-board in high-tech military capabilities. But the sheer numbers, redundancy, and simplicity of Chinese systems, coupled with a few unpredictable technological breakthroughs or state-of-the-art acquisitions, will compensate for some of China's military inadequacies. As its industrial infrastructure benefits from the current priority on investments, China will increasingly be able to fill more of its own military equipment needs. Reverse engineering efforts and select foreign purchases will remain crucial through 2013. Doctrinal writings reveal that China's goal is to be able to begin matching Western military capabilities by 2020. Until then, a gradual evolution will affect the capabilities of all services. We are now only at the beginning of this process.

## 1. DOCTRINE, STRATEGY, EMPLOYMENT (U)

(u) While the Chinese believe that Russia remains a threat in the long run, they can now devote more attention to other strategic axes, such as:

- Defending their national interests vis-a-vis the Japanese threat;
- Expanding their presence in (and rights to) the South China Sea, as well as their influence over the Southeast Asian region;
- Maintaining a balance against India; and
- Keeping their dominion over minority populations in the west, while shielding them from political and religious events in increasingly volatile central Asia.

(u) Chinese doctrine had long been dominated by the possibility of large-scale continental war to the north. It is now turning increasingly to the formulation of a more southward-looking, more conventional military concept, referred to as the "Doctrine of Local War," which applies to peripheral areas other than Russia. This by no means suggests that China has turned its back on Russia as a threat, but rather that it has expanded its threat axes to encompass different fronts. Under this concept, while the strategic orientation indeed looks to the north as a potential threat, the strategic focus is on the south, looking at a more likely although much lesser threat. The doctrine is a sharp departure from earlier formulations; implicit in it is the option for preemptive offensive operations along China's "strategic bound-

aries." The latter are defined as the air, land, or sea distance required to provide an adequate reaction time to an external threat.

(U)(S) Drawing from lessons perceived from DESERT STORM, the Chinese are reorienting their defense strategy to contend with the most likely prospect of defending their territory against the tactics and technology demonstrated by the West against Iraq. The strategy of "luring deep" is no longer a viable defense strategy in light of a modernizing China pursuing economic and industrial development. China is no longer able or willing to pay for military inferiority at the expense of sacrifices of blood, territory, and infrastructure.

(U)(S) The Chinese Navy is also adjusting to this new thinking. Traditionally, the Navy was primarily a coastal force, designed to counter amphibious landings and to "take the People's War to sea." It had little capability for mobile offensive operations. But the emergence of the Doctrine of Local War and its associated "offshore defense" strategy has brought about the concept of mobile combat groups of missile ships. Again implementation may lag, but the direction is clear.

(U)(S) The Chinese naval leadership characterizes future warfare as: "mobile, flexible, limited (in time, space, and objectives), and offensive in nature." Most current assets are ill-suited for this role, and the Navy is only slowly acquiring platforms, weapons, and sensors better able to meet the new goals. Logically, the distances at which Chinese naval task forces will be able to operate from shore will increase in an evolutionary manner as new capabilities permit. Ultimately, combat groups must be able to deploy rapidly to trouble spots. Once there, they must be able to gain the initiative in early stages of conflicts by launching offensive operations or controlling the situation through the coordinated support of naval air, submarine, and other service arms. Again; these are doctrinal goals and, although capabilities will tend to lag, the direction is clear.

(U)(S) To be successful, future naval units and combat groups must be deployed forward and/or be on constant patrol in contiguous regions where conflicts may erupt. While Chinese military leaders

repeatedly speak of highly mobile and capable combat groups consisting of large- and medium-size combatants with sophisticated weapons, they do not expect such forces to become operational until the late 1990s, and then only on a limited basis. These qualitative definitions are future goals and relative to the regional context, rather than implying parity with the West. Extra-regional deployments are not contemplated, except for extraordinary training cruises or similar diplomatic visits.

## 2. FORCE STRUCTURE (U)

(U)(S) The transformation of China's force structure is being spurred on by changing perceptions of strategic realities. China currently believes that the environment through 2013 will be comparatively stable when compared to the past 20 years. China does not foresee any major direct external threats to its security. However, according to Chinese writings, local conflicts over territory with its neighbors (particularly those in the south) can hardly be avoided. Vietnam is China's most likely adversary, with hostilities becoming more likely between 1996 and 2000. While China continues to assume its traditional defensive posture, military planners have begun to reevaluate concepts of strategic defense and tactical offense as the basic tenets of the Doctrine of Local War. Such a doctrinal shift will increasingly have a major impact on the evolution of China's force structure, especially as emphasis is shifted from the traditional Army priority to a more balanced tri-service apportionment of funds.

### a. Ground Forces (U)

(U)(S) China will continue to develop a ground force that is smaller, more streamlined, and more mobile. This should make it easier for China to respond rapidly to trouble spots internally and along China's periphery. Since 1987, the ground force has been reduced from 3 million to some 2.3 million personnel. The drawdown is expected to continue through 2003, when strength should level out around 1.6 million through at least 2013. At the same time, China will attempt to acquire, develop, and field significant quantities of new equipment to enhance its overall offensive and defensive military capabilities. However, the difficulty of modernizing the

entire ground force is immense (and financially prohibitive). Therefore, priority will go to select rapid-response units within the overall force structure. Major shortcomings in large-scale troop movement capability, air defense, and electronic warfare systems will continue to plague the ground forces through 2003. By 2013, these forces will represent a formidable challenge to any potential opponent.

#### b. Air Force (U)

(U)(S) China is committed to developing a smaller but more capable air force. Force structure has been cut significantly since 1987 and reductions will continue through 2003, when strength will level out at 200,000 personnel. Despite decades of effort, China must continue to rely on a large fleet of obsolescent aircraft through the year 2000. In the meantime, to fill critical near-term requirements, China acquired a regiment of 26 Su-27 FLANKER fighters from Russia and has ordered another regiment of 24 FLANKERS.



military force reductions were accomplished at the expense of the Army and Air Force. The number of Navy personnel has actually increased slightly (to 250,000) since 1987. This reflects the priority placed on the Navy as a result of the doctrinal shift. The new threat paradigm of local war and its offshore defense strategy requires that the Navy be rejuvenated, particularly the fleet most likely to take an active role: the South Sea Fleet (SSF). Although priority now seems to favor the SSF, all three fleets will be modernized. This calls for the formation of combat groups composed primarily of large- and medium-size guided-missile ships with three-dimensional warfighting capabilities to replace the obsolescent, smaller, less capable assets in the current inventory. Although reductions in personnel are expected through the next decade, the Navy will probably reduce at a much lower rate than the other services. Large numbers of smaller, older combatants will be retired, however, and will gradually be replaced by fewer but more capable platforms.

(U)(S) The Navy is evolving from a coastal defense force to one that will increasingly be able to challenge adversaries in the contiguous East and South China Seas, where it has long operated. In the past, priority for resource allocations went to the North Sea Fleet (NSF) and the East Sea Fleet (ESF). The NSF region includes most of the R&D centers and its mission was and continues to be protecting the industrial northeast as well as Beijing from the Soviet Union (now Russia). The ESF is potentially responsible for effecting the reunification with Taiwan (a national goal since 1949) if force becomes necessary. Changes in Chinese threat perceptions and increased interest in the South China Sea caused China to shift its priorities in that direction between 1985 and 1990. Each fleet can draw upon the resources of the others to accomplish its wartime missions.

#### 3. TRAINING/MANPOWER (U)

##### c. Naval Forces (U)

(U)(S) Since the mid 1980s, Chinese leaders have realized that modernization efforts must include overall force reduction and reorganization. Initial

(U)(S) Recruits are obtained primarily through conscription, but personnel also are encouraged to volunteer. While the relative percentage and sheer numbers of draft-age youth will be in decline after 2000, the available pool of qualified high school graduates will continue to far exceed requirements. Despite temporary economic penalties causing mili-

itary salaries to lag behind civilian wages, the traditional reputation of the military as an elite, technically oriented institution probably will ensure enough high-caliber recruits to meet the military's needs. Most individuals entering the military now participate in a college-type entrance examination to gauge their aptitude and their potential. Morale among the armed forces traditionally has been very high. If not promptly addressed, recent disparity in compensation between military personnel and their civilian counterparts could raise concerns about personnel retention. Efforts to improve conditions for military personnel will improve morale.

(U)(S) All of the armed forces are attempting to increase competency by recruiting better educated youths from urban areas and emphasizing technical potential over Communist political reliability (reversing the trend of the not-too-distant past). This "red vs expert" debate has been very costly to the development of China's armed forces for more than 40 years. The military is currently focused on the theme of "expert in command." While this theme appears to be well-entrenched (as a result of the 14th Party Congress), the potential for periodic temporary reversals in the Chinese political climate and resulting "red in command" emphasis persists.

(U)(S) Political indoctrination remains excess baggage to military education. During periods when the "red" tendency predominates, political education dominates training activities; when the "expert" is in command, political education still continues to demand some time, thus diminishing the effectiveness of professional development. As long as the Party remains in control, political education will remain a cornerstone of the defense educational system, to the detriment of its efficiency and improvement.

(U)(S) The military is reacting to the challenge of combined-arms and joint-service operations under a local war scenario. The Army has concentrated on exercises that:

- Integrate Army aviation assets;
- Simulate operations in nuclear-biological-chemical environments, severe weather, and bad terrain conditions;
- Test rapid reaction capabilities;
- Simulate anti-airborne operations; and
- Emphasize logistical support to deployed troops.

The Air Force has upgraded its overall combat readiness by improving the education of its pilots and

technicians, revamping its training system, and expanding the use of simulators. Air Force exercises also reflect the shift from "luring deep" to "forward position defense" as articulated by the Doctrine of Local War.

(U)(S) After 10 years of disruption caused by the "Cultural Revolution," naval training began undergoing major reforms in the late 1970s. The reforms revised the entire training program, expanding the number and level of training institutions and revising basic curricula. The reforms were aimed at producing the professional forces required for modern warfare.

(U)(S) Officers and enlisted personnel now receive individual and crew training prior to assignment to one of the three fleets. Training continues throughout their careers, and they are encouraged to specialize in surface, subsurface, or aviation categories in order to optimize professionalism. Training is provided by naval training institutes located in all three fleet areas. The core program centers on crew training, which is divided into three functional areas: basic underway (single ship), multi-ship (similar type), and combined-arms; the latter combines surface, submarine, and naval air elements. In the mid 1980s, the Chinese Navy began using simulators extensively; these simulators range from simple ship control and tactical maneuvers to a new Naval Combat Simulation Training System. Their level of sophistication, however, is far below that of Western systems, and is in fact rudimentary.



## 5. NAVY (U)

## a. Organization (U)

(u) (S) The Chinese Navy is a branch of the People's Liberation Armed Forces. Its commander is directly responsible to the General Staff for overall naval operations and development. The basic structure of naval headquarters closely parallels that of the senior general headquarters departments. Accordingly, in a peacetime environment, the naval staff department directs all naval functions associated with command and control (plans and operations, training, intelligence, and communications). Subordinate elements within the naval staff department serve specific operational and administrative roles in the national-level command and control organization.

(u) (S) As noted earlier, the Navy's operating forces consist of three commands: the North, East, and South Sea Fleets. The fleets are further broken down into naval districts and sectors, with units organized into "type" forces (shore establishments, surface combatants, rear services, naval aviation, etc.) for administrative and operational control. Ships are organized by types into echelons of various sizes (flotillas, squadrons, and divisions) and operate independently or as part of task-organized operational elements.

(u) (S) The Navy is divided into national- and fleet-level commands. The national naval headquarters, located in Beijing, functions under the direction of the Central Military Commission through the General Staff Department. This headquarters is the senior naval authority, and its commander is responsible for the operation, administration, and training of naval forces. These duties are carried out with the assistance of a political commissar, three deputy commanders, a chief of naval staff, and the directors of the various departments that constitute the naval headquarters.

(u) (S) The national-level naval headquarters exercises direct control over the three fleet headquarters and selected shore activities. Since 1987, the fleets have adopted a triple-echelon command structure designed to support deep-water operations, naval air operations, and coastal defense activities. Fleet headquarters exercise administrative and operational control over both the shore establishment and forces afloat. Major surface combatant and submarine flotil-

las are directly subordinate to fleet headquarters for deep water operations. The fleet's coastal defense structure is controlled by the fleet headquarters through its subordinate district, sector, and missile/torpedo attack boat flotilla headquarters. Finally, naval air operates under the control of fleet headquarters through its subordinate naval air headquarters.

(u) (S) The North Sea Fleet (NSF) is responsible for defending the area from the Shandong/Jiangsu provincial border north to the North Korean border. Fleet headquarters is located at Qingdao. The NSF shore establishment includes naval bases, support facilities and communications observation posts. The afloat force consists of four submarine flotillas, one destroyer flotilla, and three missile/torpedo attack boat flotillas. In the past, the NSF was given top priority because of the Soviet/Russian threat from the north and because the NSF houses many of the Navy's R&D facilities. (During the formative years of the Navy, northeast China had the industrial infrastructure needed to support them.) Defense of the northeast will continue to be of prime importance because this region encompasses Beijing, the military headquarters, and the industrial heartland.

(u) (S) The East Sea Fleet (ESF) is responsible for defending the area from the Shandong/Jiangsu provincial border southward to the Fujian/Guangdong provincial border. Its headquarters is in Ningbo. The ESF shore establishment includes naval bases, support facilities, and Communications/Observation Posts (COPs). The afloat force consists of two submarine flotillas, one destroyer flotilla, one landing ship flotilla, and two missile/torpedo attack boat flotillas, as well as a number of independent and auxiliary units. Due to its geographic location, this fleet would have a crucial role in a military option designed to reunify Taiwan with the mainland. Forcible reunification may be fading as an option, as booming trade and investment from Taiwan draw the island closer to the mainland. Recent reports suggest efforts are being made to reach a peaceful accord, provided the idea of "One China" is upheld by both parties.

(u) (S) The South Sea Fleet (SSF) is responsible for defending the sector from the Fujian/Guangdong provincial border southward to the Vietnamese border. SSF headquarters, located at Zhanjiang, exercises operational and administrative control over one submarine, one destroyer, and two missile/torpedo attack boat flotillas, as well as naval bases, support

facilities and COPs. The SSF has expanded significantly since its early days. China captured the Paracel Islands from Vietnam in 1974 and occupied a number of islands in the Spratly Archipelago in 1988. Both island groups were placed under the control of Zhanjiang. Since the late 1980s, changes in Chinese threat perceptions, coupled with increased interest in the South China Sea, have caused China to begin to shift its priorities to the SSF.

(U)(S) The Chinese Navy is responsible for safeguarding China's national unity, territorial integrity, and ocean rights; defending against a localized war against China on the open seas; and deterring and guarding against all possible seaborne foreign invasions. Implicit in these assigned roles are Chinese concerns for the reunification of Taiwan, protection of the Paracels, and the eventual "recovery" of most (if not all) of the Spratlys. To accomplish these roles, the Navy conducts constant surveillance against air and surface penetrations into Chinese waters, reacts to any incursions, and intercepts and investigates unidentified or hostile elements. In addition, the Navy has been training and developing its force structure for the eventual recovery of the Spratlys. While China has a limited at-sea refueling capability, ships can now make port calls for bunkers at Woody and Duncan Islands in the Paracels, and Fiery Cross Island in the Spratlys. Politics aside, Chinese naval units have also been noted calling at the Taiwanese-held island of Itu Aba.

## b. Amphibious Warfare (U)

### (1) Amphibious Forces (U)

(U)(S) China's amphibious lift capability is estimated at one regular infantry division (although there is only one Marine brigade). Since current Marine training does not include a scenario for integrated multi-battalion assaults, it appears unlikely that the Navy would seek to lift and land more than a reinforced battalion at any one location. Lift could be increased dramatically by employing merchant ships and civilian ferries to augment naval forces, especially for short- and medium-range lift within the region.

(U)(S) The Navy's effective amphibious landing capability is also limited to the operational radius of China's land-based naval aircraft. China has given

priority to developing aerial refueling in order to extend the combat radius of its land-based aircraft, and recent events indicate that this capability could soon be achieved. The Navy continues to pursue acquisition of a three-dimensional warfighting capability (air/surface/subsurface) to protect surface action groups from hostile forces, albeit with seemingly limited success to date.

(U)(S) The present distribution of the Navy's amphibious assets, and the formation and subsequent deployment of a Marine force to the SSF, reflect Chinese interest in maintaining the Paracel and Spratlys Islands as territorial markers for establishing sovereign control over much of the South China Sea. The push for increased ship construction programs and the shift of priorities to the SSF are a result of this goal. Among its new construction programs are two new classes of amphibious ships: the YUDENG Class medium landing ship (LSM) and the YUTING Class tank landing ship (LST). These will replace World War II era units long used in logistics support roles. Initial units of both classes will be subordinated to the SSF. Subsequent production schedules are not known.



As it is responsible for providing potential support to China's claims in the South China Sea, the force trains for both amphibious and counter-landing operations. In addition, Marine recruits receive training in airborne assault, reconnaissance methods, and martial arts. Although individual training skills are emphasized, Chinese Marines cannot be compared with their Russian or U.S. counterparts in performance or capability. Chinese military leaders acknowledge that the force is in its formative stages. Major areas of weakness are lift capacity, tactical air support beyond coastal waters, and naval support.

(U)(S) The Marines are well-adapted to conducting such security operations as occupying and setting up barracks on previously uninhabited islands, atolls, and coral heads in the Spratly chain. Such operations are usually small and simple in nature. China recog-

nizes the importance of amphibious operations and is striving to improve this capability. However, the lack of proper logistics support beyond coastal waters will hamper significant improvements in capabilities through 2013.

#### (2) Limited-Objective Operations (U)

(U)(S) The Marines frequently practice deployment of troops in unopposed landings on small uninhabited islands in the Spratlys. The Chinese, however, did assault the Vietnamese-occupied Xisha Islands in the Paracels Islands in 1974, and took and maintained control of them. This occurred before the Marine Corps was established.

#### (3) Conventional Combat Operations (U)

(U)(S) Due to their small numbers and lack of air and logistics support, the Marines would be hard-pressed to take and defend an area outside coastal waters, where there would be no support from air and surface vessels.

#### (4) Antilanding Capability (U)

(U)(S) With over 14,000 km of coastline, China depends mostly on early warning and a limited surface-to-surface missile (SSM) capability to defend its shores. If an amphibious landing were to take place on a Chinese shore, the task of answering this assault would be borne mainly by the Army and Garrison Defense Commands. The defensive would be executed jointly by all services, supported by reserves if required. The following are tasks assigned to naval forces in antilanding operations:

- Conduct reconnaissance and provide early warning;
- Lay mines and, in coordination with engineers, construct barriers;
- Conduct antiair operations in coordination with the Army and Air Force;
- Inflict maximum damage on the enemy at his staging areas, during his sea crossings, and during his amphibious assault in cooperation with the Air Force;
- Continue the pressure along the beachhead in coordination with the Army and Air Force;

- Attack the supporting fire element of the enemy's warships, minesweepers, and at-sea escort and screening forces;
- Attack the enemy's succeeding transport landing ships;
- Disrupt the enemy's sea lines of communications; and
- Pursue and destroy the retreating enemy force.

(U)(S) The Chinese Navy is in the first phase of modernization. Its basic platforms and armaments represent 1950s designs and capabilities, and sensors are mostly of 1950s and 1960s vintage. Much of the inventory is either in ready repair or near reserve status, and the equipment of individual units may not be fully functional. Hardware improvements are unevenly fielded; new equipment tends not to be universally applied to either a ship class or type. (For example, depending on its pennant number, a JIANGHU FF may or may not have a particular capability.) This requires opposing forces to treat Chinese units as somewhat more capable than they really are in many cases.

(U)(S) Implicit in the writings about local war doctrine is the flexibility to project forces overseas. The naval modernization continues to reflect China's concern for regional conflict as well as long-term concerns about Russia. China's force development through the year 2013 will continue to reflect these concerns. Short of a major change in international dynamics, China probably will not embark upon a collision course with the United States. China's naval capabilities are greater than those of individual Southeast Asian countries.

(U)(S) In East Asia, while China is currently unable to match the naval capabilities of any of its immediate neighbors, it does not expect to address the naval forces of Russia, Japan, or even Taiwan in the foreseeable future. By the year 2000, China could deploy combat groups, consisting of frigates and destroyers, with modest three-dimensional warfighting capabilities. As China enters the 21st century, in spite of fiscal and technological limitations, the Chinese may introduce a number of new classes of submarines (nuclear and conventional) and an aircraft carrier (VTOL or VSTOL). Construction of the LUHU Class destroyer will continue, and a new class of frigate will be introduced for series production. By 2013, China expects to be able to mount a credible naval challenge to any opposing force within the region.

## 6. AIR FORCE (U)

(u) (S) China's Air Force is organized defensively and is equipped to provide territorial air defense, as well as support of ground forces' defensive and offensive operations. It also performs aerial reconnaissance, electronic warfare, and airlift support missions.



(u) (S) The current Air Force order of battle includes 6 bomber divisions, 6 fighter/bomber divisions; 27 fighter divisions, 2 transportation divisions, and 11 independent regiments (1 fighter/bomber regiment, 5 reconnaissance regiments, and 5 fighter regiments). The Air Force reorganization, which began in 1978 and was completed by 1988, resulted in the removal of 1,000 aircraft from the order of battle and a 25% reduction in manpower.



(u) By 1994, China will have developed an inflight-refueling capability based on the B-6D BADGER or a modified transport, probably using technology associated with Iran's Beech Model 1080 refueling systems. Refuelable aircraft include the F-8-II, F-8-III, FB-7, F-10, [REDACTED] and possibly the F-7E, B-6 and the A-5M (if the latter is produced). This capability will multiply force capabilities by extending the range of projected air power, particularly over the South China Sea. The B-6 BADGER

[REDACTED] can be used as a delivery platform for the C601 ASM and mines.

[REDACTED] More such platforms are likely to be developed. A second-generation capability, either indigenously produced or imported, is likely before the end of the century.

(u) (S) China had received its first increment of 26 Su-27 FLANKERS by the end of 1992, expects a second increment of 24 FLANKERS in early 1994, and will probably purchase a third increment of 24 FLANKERS (however, the first 26 FLANKERS are not expected to be combat ready until 1995). An air division of 74 FLANKERS would significantly improve China's capability in a local war scenario. Other potential acquisitions from Russia include: aircraft gas turbines (jet engines and turboprops), radar and avionic systems, air-to-air and air-to-ground weapon systems, armed helicopters, additional IL-76s, Tu-154s, and perhaps eventually MiG-31s and Tu-22Ms (although Russian military leaders are known to have expressed violent opposition to exporting the latter). China is upgrading the F-8-II and developing the F-8-III.

[REDACTED] The F-10 is expected to enter production by 2003 and will be the first indigenous, highly maneuverable fighter using fly-by-wire systems and incorporating reduced signatures (compared to current Chinese aircraft). By 2010-2013, China is expected to field a low-observable aircraft.

#### 7. ARMY (U)

(u) (S) The Chinese Army is responsible for defending China and supporting national command decisions on foreign policy. It also assists in internal security matters, a role that has been heavily debated through the years (the People's Armed Police (PAP) was created to take up much of that responsibility). One of the Army's mission is to help the PAP maintain internal stability, as was demonstrated during the 1989 Tiananmen crisis.

(u) (S) Through a comprehensive modernization effort, the Army has become a combined-arms force designed to meet the demands of the new local war doctrine. Through improved firepower, mobility, and communications, the Army hopes to develop the strength to conduct active defense operations as defined in the new doctrine. The Army is organized into main and local force units and is deployed in seven military regions.

(u) (S) Local forces are commanded by Military Districts subordinate to the military region headquar-

ters. They are designed to operate only within their Military District, and therefore require less mobility. Military Districts comprise 31 garrison divisions, 10 garrison brigades, 51 border defense regiments, 1 tank division, 1 infantry division, 29 garrison regiments, 3 border defense divisions, and various combat support and combat service support units. China recently began redesignating its garrison units as Coastal Defense units, although this move is not expected to change their overall mission. The whole is supported by 1.2 million reservists organized into well over 40 division-size units. Beyond these numerically impressive forces, there are also the PAP and other large security forces with functions related to maintaining internal stability.

(U)(S) The sophistication of Army equipment ranges from low to medium technology. Main forces are typically better equipped than local ones. Reserve forces maintain basic capabilities, although they are more ideally suited to the protracted guerrilla functions of peasant warfare than to formal warfare.

(U)(S) China will continue to introduce significant quantities of new equipment, using a cautious approach aimed at ensuring that personnel can operate and maintain the new weapons and support systems. The Army has several programs to improve armor, artillery, helicopters, and air-mobile equipment. It is also committed to upgrading its air defense capabilities. A number of new systems are under development, including the HN-6 (a man-portable, medium-range, medium-altitude SAM), the KS-1 (a high-altitude system), and the HQ-9 (a system reportedly capable of intercepting both aircraft and short-range ballistic missiles). These missiles are designed to replace the Army's aging, inadequate SAM force.

(U)(S) The Army plays an important political role domestically. It is the ultimate guarantor of the Party's political primacy and survival. This was most recently displayed during the Tiananmen Square massacre in June 1989. Political schisms, partially along regional lines, are likely to emerge in China, and these could spread to the Army. Due to a deep sense of discipline and loyalty to individual commanders among Chinese troops and limited communications between Army units (because of linguistic differences and the poor quality and limited quantity of communications equipment), troops are likely to follow the order of their local commanders during such schisms. This could well contribute to fragmentation of the Army during a period of internal disorder.

(U)(S) The 1984 Military Service Law created a formal reserve structure. Reserve organizations are commanded and manned by core cadres consisting of active duty officers as well as local government and party leaders. Lower-echelon officers and enlisted members of the organization are drawn from the two-category reserve personnel pool. Category one personnel are young (18 to 28 years old), well qualified, and receive basic and specialized military training from the active force. Category two personnel (29 to 60 years old) receive less training and would be used as fillers to round out reserve units in wartime.

The Army has 40-plus reserve divisions to augment or round out existing group armies and other active force units. Naval reserve units will be used to augment coastal defense units and help the logistical elements bring stocks to wartime level. The Air Force maintains no known flying units in the reserves; its reserve units would augment and man AAA sites and augment logistical elements of the active force.

## SECTION II CURRENT AND PROJECTED MILITARY CAPABILITIES (U)

### A. UNDERSEA WARFARE (U)

#### 1. OVERVIEW (U)

(u) (d) The Chinese Navy's overall posture is defensive, based on the new doctrine of local war and its associated offshore defense strategy. The strategy is outward looking and acknowledges that war will be fought on land, on sea, and in the air at or near China's "strategic boundary." This boundary is defined as the distance essential to provide an adequate reaction time to external threats. Implicit in the strategy is the option for preemptive offensive operations along or beyond China's geographic borders and territorial waters. While ASW operations are an integral part of that philosophy, obsolete weapons and limited-range surveillance and detection systems allow for little more than a rudimentary standard of ASW.

(u) (s) China's submarine inventory consists of 86 units, both nuclear and conventional platforms: the XIA SSBN, [REDACTED] five HAN Class SSNs; one MOD ROMEO Class SSG, [REDACTED] one GOLF Class SSB, [REDACTED] eight MING Class SSSs, and 70 ROMEO Class SSSs, [REDACTED]

China is attempting to purchase significantly improved weapons and sonar suites in an effort to upgrade the Navy's ASW capabilities.

(u) (s) Although China's Navy possesses the world's third largest surface ASW force, it is primarily based upon dated technology. Surface ASW assets consist of 17 destroyers, 33 frigates, and 106

ASW-capable patrol craft. The LUDA I/II/III Class DD, JIANGHU VII Class FF, and HAINAN Class PC are China's primary ASW ships. While numerically impressive, almost all platforms use 1950s technology and are virtually ineffective against modern submarines. However, two new JIANGWEI Class FFs, one LUDA III Class DD, and one LUHU Class DD may provide a significant technological upgrade to the surface ASW force. A second LUHU DD and two more JIANGWEI FFs were recently launched. By constructing these larger and more capable platforms, and seeking to upgrade existing units by integrating improved technology, China has shown a dedication to improving its surface ASW capability.

(u) (s) China's airborne ASW assets are produced domestically and consist of three ASW-configured SA-321J SUPER FRELON (ZHI-8) helicopters, one to five ASW-configured SA-365N DAUPHIN II (ZHI-9) helicopters, six SH-5 HARB A seaplanes, and an unknown number of Y-8 CUB, BE-6 MADGE, and B-5 BEAGLE. While the overall force is small, it is configured to employ Western sensors and weapons, and has developed some skill in coordinating airborne prosecution of a cooperating submarine. To date, this skill has been developed using "canned" training—exercises that are not challenging and probably would limit the Navy's overall success against a modern submarine.

#### 2. SUBMARINE FORCES (U)

##### a. Classes (U)

(u) (d) All of China's nuclear submarines, the XIA SSBN and the five HAN SSNs, were indigenously produced.

(u) (8) The GOLF SSB, Soviet-designed but built in China, was modified in 1970 for trials service; it has been used, in rare active periods, as a testbed for China's indigenously produced SLBM.

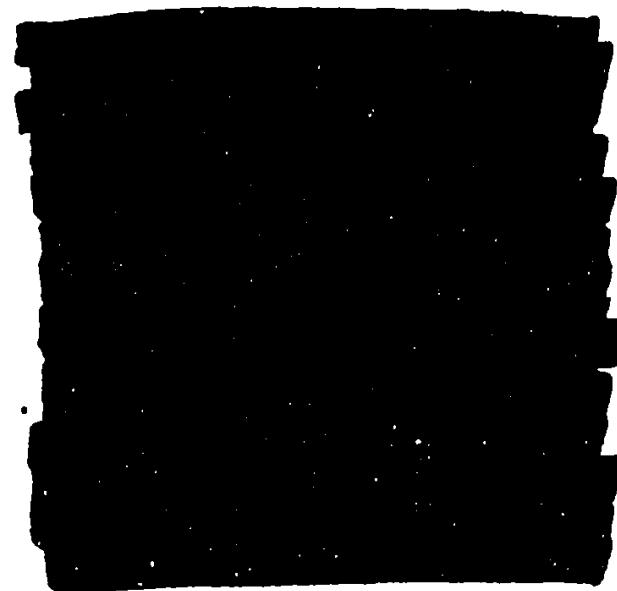
The GOLF SSB should not be considered a combat submarine.

(u) (8) The MING Class is advertised as an "Improved ROMEO," with a greater beam, and the addition of a topside rudder. MINGs have been built at Wuhan since 1971.

(u) (8) China is developing a second-generation SSBN. The new platform may have at least 12-16 SLBM tubes and an upgraded navigation system, and should become operational between 2000 and 2005. A second-generation SLBM, the 8,000-km-range JL-2, is being developed for this follow-on.

(u) (8) China has also been developing a new-generation diesel-electric attack submarine. This unit was to be a single-hull, single-screw submarine of around 2,000 tons displacement.

Since China has signed a contract to purchase three KILO Class submarines from Russia, and subsequent production will shift to a Chinese shipyard, the status of China's indigenous platform program is unclear.



(u) [REDACTED] China lags behind Russia and the West in fixed-wing airborne ASW and dedicated maritime patrol capability. Most maritime patrols are conducted by two specially configured Y-8 aircraft based at Laiyang.



### 3. AIRBORNE ASW SENSORS (U)

(u) [REDACTED] Chinese Navy Air Force rotary-wing ASW platforms include no more than five ASW-configured SUPER FRELON and DAUPHIN II helicopters. Unlike the SUPER FRELONS, the smaller DAUPHINS can be embarked on the two destroyers and three frigates with landing facilities. The Chinese have expressed strong dissatisfaction with the DAUPHIN due to its inability to carry sensors and weapons at the same time. The Navy also has six HARB A amphibians for ASW and may have modified Y-8 transports for maritime reconnaissance. The Y-8s may have a rudimentary ASW capability.





## 6. ASW WEAPONS (U)

### a. Torpedoes (U)

*(U)S* We are not certain in which direction China will move in upgrading its heavyweight torpedo inventory. In conjunction with its overall goal of modernizing the Navy, China is expected to take advantage of the technological transfer of data and material offered by other torpedo-producing countries. British, French, Italian, Russian, and American manufacturers are eager to make foreign military sales. [REDACTED]

[REDACTED]

[REDACTED]

## 7. NAVAL MINING CAPABILITIES (U)

(U)(S) [REDACTED] China has good defensive and modest offensive mining capabilities using a wide variety of mine types and launch platforms. Mine stockpiles include old Soviet moored contact and bottom influence mines as well as an assortment of domestic types.

[REDACTED] Most Chinese mines are available for export, and China is willing to sell to virtually anyone.

## b. Rockets (U)

(U)(S) ASW rockets are basically small depth charges propelled through the air by rocket motors. To account for the inherent inaccuracies of rockets and potential targeting errors, ASW rockets are normally fired in barrages. The Soviets developed a number of these systems in the late 1950s and early 1960s, and the Chinese were influenced by these developments. China currently has two ASW rocket systems, the FQF-2500 and a copy of the 1950s-era Soviet-designed RBU-1200.

(U)(S) [REDACTED] Within the next 20 years, China may obtain advanced propelled-warhead mines from Russia and/or develop an encapsulated torpedo mine of its own. Regardless of its acquisition successes, China's indigenously developed mines are expected to lag 10 to 15 years behind Western mines in technical sophistication.

(U)(S) The Chinese Navy can deploy mines from submarines, surface ships, and aircraft. Although China currently has only one dedicated minelaying platform, the WOLEI MM, most surface combatants are equipped with mine rails, and a variety of commercial platforms could be adapted. Minelaying is practiced periodically by Chinese Navy aircraft, surface ships, and submarines.

(U)(S) The Chinese Navy also has a large fleet of Soviet-designed T-43 MSF minesweepers. This fleet is augmented by a few smaller MSC and MSI units as well as nearly 50 remote-controlled minesweeping drones. Although the Navy has a sizable mine countermeasures (MCM) force, its capabilities are limited to mechanical and influence minesweeping. The Navy is not currently assessed to have a credible minehunting capability.

(U)(S) China has expressed interest in developing a minehunting capability by acquiring foreign minehunting vessels and equipment. As with many other weapon systems, China may attempt to reverse

engineer those systems and eventually develop a domestic production capability.

## B. SURFACE/COASTAL WARFARE (U)

### 1. AIR THREAT (U)

(U) (S) China's airborne ASUW threat has been limited primarily to 15 B-6D BADGERS armed with the [REDACTED] (C601) ASCM. The B-6D armed with the C601 has been proven to be a capable ASUW combination against large, slow, unarmed targets (as was demonstrated at the end of the Persian Gulf "tanker war" in the 1980s). A smaller, more sophisticated weapon is in [REDACTED] development. This missile is the air-launched version of the [REDACTED] (C801) and will be the first Chinese ASCM compatible with fighter-size aircraft, including the developmental FB-7 and possibly the less-capable A-5 FANTAN.

weapon systems. The BEAGLE will be replaced by the FB-7 in the Chinese Navy. The FB-7 is currently under development.

### 2. SURFACE COMBATANT THREAT (U)

(U) (S) China's surface fleet is numerically the largest component of the Navy—totaling well over 800 ships and craft. Most have outdated weapon systems, obsolete electronics, inadequate electronic warfare capabilities, and limited endurance. The greatest portion are coastal defense craft. Only 50 ships are classified as principal surface combatants (17 destroyers and 33 frigates). To replace its aged fleet and improve operational capability, China has accelerated surface ship construction programs since the late 1980s, and is modifying existing classes of ships to accommodate new sensors and weapons.

(U) (S) China's principal surface combatants include four classes of destroyers: LUDA I, LUDA II, LUDA III, and LUHU. The LUDA I is loosely based on the Soviet-built KOTLIN Class DD. The LUDA II was modified from a LUDA I [REDACTED] in 1985 by adding a helicopter deck and hangar to support one SA-365N DAUPHIN II helicopter. The recently constructed LUDA III is configured for an ASW role; it has a VDS and Italian A224S light-weight ASW torpedoes. The LUHU is China's newest, largest (4200 tons), and most modern destroyer, but still lacks state-of-the-art weapon or sensor systems. It is a multipurpose combatant capable of carrying out ASW, AAW, and ASUW missions. The first LUHU has completed sea trials and is expected to be operational in the latter part of 1993 or early 1994, and the second unit has been launched. China is expected to have four operational LUHU DDs by 2003, and six by 2009. Except for the LUDA III and LUHU, which are equipped to carry either the [REDACTED] (C801) or the naval version of the [REDACTED] (C802) SSM, all Chinese destroyers currently carry the [REDACTED] (HY-1) SSM.

(U) (S) China's frigates classes include the JIANGWEI, JIANGHU I, JIANGHU II, JIANGHU III, JIANGDONG, JIANGNAN, and RIGA.

(U) (S) The mines and bombs of the medium-range B-6 BADGER A and obsolescent short-range B-5 BEAGLE, and the torpedo capability of the naval B-5 BEAGLE pose the main threat to enemy surface ships; however, the BEAGLE is limited in foul weather or at night due to lack of modern sensors and

The JIANGHU III is fitted with [REDACTED] (C801) missiles, and the JIANGDONG is fitted with [REDACTED] (HQ-61) missiles. The JIANGNAN's main armament are standard, single, enclosed 100-mm/56 DP and twin, open 37-mm/63 AA guns. The newest and most capable frigates are the JIANGWEIs; they can accommodate one SA-365N DAUPHIN II helicopter, and are fitted with C801 or C802 SSMs, twin enclosed 100-mm/56 DP and twin 37-mm/63 AA guns, [REDACTED] (HQ 61) SAMs, and possibly a new command and control system.

(u) (S) Two JIANGWEIs are operational, two more are under construction, and the final two should be operational by 2000. The JIANGWEI Class is replacing the JIANGNANs and RIGAs, the rest of which were expected to be removed from the inventory by the end of 1993. A new frigate design is expected to be added to the Chinese Navy by 2005, with three units operational by 2010.

(u) (S) China also fields more than 200 missile attack boats (PTG) and missile patrol combatants (PGG). These constitute a formidable ASUW force, well suited for their mission of coastal ASUW. A notable addition to China's surface capability is a projected aircraft carrier that will probably be operational by 2007. The carrier will probably be built to carry fixed-wing aircraft. However, whether these will be vertical/short take-off and landing aircraft or conventional take-off and landing aircraft is unknown. Initially, the carrier will probably operate with multirole helicopters.

### 3. SUBMARINE THREAT (U)

(u) (S) China's submarine force consists of 5 nuclear attack and 78 diesel-electric attack submarines. However, these are based on 1950s and 1960s technology. Offensive and defensive missions of China's submarine force include coastal defense, mining, and ASUW against combatants and merchant shipping. The submarine force is the Navy's only effective means of challenging an enemy naval force at extended ranges from the Chinese coast. Chinese submarines routinely conduct ASUW operations involving nuclear and diesel attack submarines prosecuting destroyers, frigates, and landing ships. Additionally, ASUW operations have included small groups using a "wolf pack" approach to engage

surface targets. Torpedo firings are rarely noted, and it is not known whether submarine ASUW exercises are scripted (although they appear to be). [REDACTED]

(u) (S) China's submarine ASUW threat could increase significantly by 2013 due to the possible procurement of Russian or Western naval technology in the fields of submarine quieting, and improved sensors and weapons, as well as through increased proficiency in the use of its newly acquired systems.

## 4. AMPHIBIOUS/COASTAL THREAT (U)

### a. Coastal Defense Forces (U)

(u) (S) Responsibility for coastal defense lies with the Chinese Navy. As such, Coastal Defense Headquarters is subordinate to the Navy General Headquarters. Regional and local coastal defense forces are administered to by the Coastal Defense Headquarters, but operational control is maintained by the three fleet area headquarters: North Sea, East Sea, and South Sea through their district and sector headquarters. Each fleet area has an extensive system of coastal defense radar stations that play an important role in the surveillance of coastal waters. Additional radars are located in the immediate area of each naval base. There are 21-23 coastal defense sites employing the [REDACTED] (HY-2) missile.

### b. Coastal Defense Missiles (U)

(u) (S) The Navy has operational control of the land-based ASCMs that serve as backup to China's seaborne forces. [REDACTED] (HY-2) cruise missiles [REDACTED] provide coastal

defense of the Bohai Gulf, Shanghai, and Tonkin Gulf areas. Most operational sites are in and around the Bohai Gulf in the North Sea Fleet area. Over the next 20 years, China will seek to improve the range and capability of its current coastal defense missile force, and move to a more mobile system that is harder to target. Additional coastal sites may be developed in fleet areas that are now thinly covered.

Classes, the new twin 100-mm mount on the LUHU Class, and one French-made 100-mm mount on a frigate. Obvious production problems with one weapon, a twin 57-mm DP mounting, have required substitution of the less-capable twin 37-mm AA in its place in many ships. Fire control systems are primitive, with most frigates lacking any form of radar fire control direction, and most guns under 130-mm (except the twin 57-mm and the new 37-mm AA mount) lacking anything but local, optical control. There does not seem to be any form of centralized weapon control system or combat data system in use, except perhaps on the LUHU and JIANGWEI Classes. For surface roles, all Chinese naval guns will be used when necessary, but only the larger 100-mm and 130-mm mounts have a significant surface gunfire support capability.

(U)(S) China also has fixed coastal defense artillery sites. Though little is known about these sites, they are believed to be manned by naval reserve forces. It is unlikely that China would attempt to increase the number of artillery sites or upgrade its coastal defense artillery system. More likely, coastal defense artillery will be phased out in favor of a mobile coastal defense missile system. This would be in line with both cost cutting efforts and a desire to increase capabilities.

(U)(S) While information about Chinese land mine warfare capability is scarce, China probably possesses a large inventory of various types of anti-personnel and antitank mines. There is currently no information about any types of minefields on or near beach areas, but China does have the capability to emplace such mines. Naval mine warfare is an important component of China's defensive military doctrine. The doctrine indicates that, during hostilities, extensive minefields would protect Chinese ports and naval bases. China might also use naval mines in an offensive role. However, such use would be unprecedented.

## 5. WEAPONS (U)

### a. Guns (U)

(U)(S) China has produced a wide range of naval guns, from 12.7- to 130-mm, which are designed to fulfill both offensive and defensive missions. Chinese ships are fairly well equipped with naval gun systems, although most of the systems are crew-served. Crew-served weapons are slower to react to threats, and their effectiveness is impaired by low-light levels or adverse weather conditions. Although Chinese ships are heavily armed from the standpoint of numbers of gun mounts, most guns are obsolescent, crew-served systems. Exceptions include the new twin 37-mm AA guns on the LUHU and JIANGWEI

### b. Surface-to-Surface ASCM Systems (U)

(U)(S) CSS-N1 The [REDACTED] is based closely on the Soviet ship-launched [REDACTED] STYX. [REDACTED] Currently deployed on more than 200 Chinese combatants, the maximum range of the CSS-N-1 is 46 km.

[REDACTED] CSS-N-1 systems will be completely phased out and replaced with the [REDACTED] (C801) and naval variants of [REDACTED] (C802) between the late 1990s and 2013.

(U)(S) SILKWORM The [REDACTED] (HY-1) was China's first domestically produced land-based coastal defense cruise missile. The SILKWORM is essentially an extended-range version of the CSS-N-1, with a maximum range of 85 km and an average preset cruise altitude of 100 or 200 m. [REDACTED] A follow-on SILKWORM variant, the [REDACTED] (HY-1A), became operational in the mid 1970s [REDACTED] Although the land-based version is no longer in production, the SILKWORM was adapted to a ship-launched system in 1977 and is designated the CSS-N-2/ [REDACTED] The CSS-N-2 is carried on Chinese

LUDA Class DDs but probably will be obsolete by 2003, when it might be replaced by naval [REDACTED] (C802) variants.

(U)(S) The [REDACTED] (HY-2), an extended-range version of the SILKWORM, has a maximum range of 105 km and preset cruise altitudes of 100, 200, or 300 m. [REDACTED] replaced the SILKWORM as a land-based coastal defense system.

deployed missiles in China by 2003. [REDACTED]

(U)(S) An-extended range turbojet-powered C801 variant, the [REDACTED] (C802), is reportedly ready for final production and is expected to become operational before 1998. Using a slightly elongated C801 airframe and the same C801 sea-skimming flight profile, its turbojet propulsion system allows the C802 a maximum range of 120 km. The C802 will be deployed as a ship-, air-, and ground-launched missile system by 2003, and will augment the shorter-range C801. Both systems, including planned variants and follow-on models, will remain operational through 2013 and probably will have replaced the STYX [REDACTED] type weapons by then.

(U)(S) Variants are currently in use at Chinese coastal defense sites and will remain operational well into the 1998-2003 period. Even with new technological developments and sophistication in airframe design and manufacture, the Chinese regard the HY-2 as a highly lethal (513-kg warhead), dependable antiship weapon.

(U)(S) Seeking a smaller, more-compact alternative to the bulky STYX/SILKWORM aerodynamic design, China developed the [REDACTED] (C801) in the early-to-mid 1980s. The C801 is a two-stage, solid-propellant, multipurpose missile system inspired by the French EXOCET design; it can be launched from land sites, surface ships, submarines, and aircraft. Maximum range is 46 km, and the missile can cruise at a preset altitude as low as 20 m with a minimum terminal altitude of 7 m. The C801 will be one of the most widely

bat capability of the remaining units by introducing improved third-generation and new fourth-generation aircraft along with new air-to-air and air-to-ground armaments.

(U)(S) The bulk of Chinese fighter and fighter-bomber missions are carried out by F-6 FARMER, F-7 FISHBED, and A-5 FANTAN aircraft armed with close-in IR seeking missiles and free fall bombs; they are equipped with obsolescent avionics and are mostly limited to operating under visual flight rules. The F-8-I FINBACK A, a single-seat delta-wing aircraft,

is intended for strategic air intercept and battlefield air interdiction missions. The F-8-I, considered a modern fighter by the Chinese, is an advanced second-generation aircraft by Western standards. Even though the F-8-I has maneuverability similar to the U.S. F-4 PHANTOM and 30% more range than the F-7 FISHBED, it has poor visibility from the cockpit and a limited radar, is difficult to maintain, and is limited to IR missiles for air engagements and bombs for ground attack. The F-8-I has been produced in limited numbers and is being superseded by the F-8-II.

(U)(S) The F-8-II FINBACK B is similar to the F-8-I except that it has F-4-style cheek inlets, a full nose radome, and an added inboard wing pylon.

The F-8-II is the first indigenous Chinese fighter to have a beyond-visual-range (BVR) capability. Nevertheless, the F-8-II is based on an outdated airframe, is reportedly underpowered, and has slightly less range than the F-8-I. The F-8-II entered service in 1992 and will remain in production until the F-8-III comes on line. The F-8-II is equivalent to a third-generation fighter by Western standards.

(U)(S) The Russian Su-27 FLANKER, China's only true fourth-generation fighter, is the best fighter in the Chinese Air Force. Twenty FLANKER Bs and six two-seat FLANKER Cs were delivered in 1992. The total order is reported to be 74.

The FLANKERS represent a significant commitment to upgrading the air superiority capability of the Chinese Air Force.

## C. STRIKE/AIR WARFARE (U)

### 1. AIRCRAFT CAPABILITIES (U)

#### a. Chinese Air Force (U)

(U)(S) Although it has a numerical advantage over other countries in the region, the Chinese Air Force is limited by large numbers of second-generation aircraft with obsolescent armament and poor support systems. As a result of its assessment of DESERT STORM, the Chinese leadership has embarked on a path to reduce the numbers of operational aircraft while increasing the overall com-

(u) The Chinese have reviewed their Air Force's "strategic" plan based upon lessons learned from DESERT STORM. They have decided to shift from using large numbers of unsophisticated aircraft to overwhelm the opposition to using smaller numbers of more capable modern aircraft to achieve the same objective. China has begun to implement this change by redirecting internal developmental efforts and by acquiring critical foreign systems and subsystems. Since the early 1960s rift with the Soviet Union, foreign acquisitions have usually been limited to small quantities for use in reverse engineering of the systems. Current efforts are centering around outright acquisition of large numbers of critical systems and negotiations to produce modern equipment in China. Key areas the Chinese are concentrating on include airframe technology, avionics, propulsion, armaments, and subsystems components. Perhaps as important, China is also finally seeking to acquire basic "know-how" in such areas as industrial quality control and testing. The latter should produce better "results" across the board, including reverse engineering efforts.

(u) (S) The Chinese Air Force will probably continue to downsize its air interceptor force, from some 93 regiments in 1994 to 32 regiments by 2013. Older fighters such as the F-6 FARMER D/G will be phased out first, while slightly more capable all-weather fighters like the F-6 FARMER B/E will remain in the inventory longer. Production of the F-7E FISHBED is projected to continue until around 2003, when F-10 production could be underway. Trial batch production of the new F-7E, which began in 1993, will result in operational deployment of the first F-7E by 1994 or 1995.

(u) (S) Other indigenous fighter programs are under development: the SUPER 7, the F-8-III, the F-10.

The SUPER 7 is to be in production by 1998 and, if overall warfighting performance is good, limited numbers could enter service as A-5 FANTAN replacements until the F-10 is available.

(u) (S) The F-8-III is projected to enter production by 1996 or 1997.

The F-8-III will be China's first indigenous fourth-generation fighter aircraft.

(u) (S) The F-10 has been under development since the mid-1980s and is projected to enter production by 2003 at the latest.

The F-10 is intended to replace the A-5 FANTAN, F-7 FISHBED, and F-6 FARMER, and is to be built in large numbers.

The F-10 will be equivalent to a treated/reduced-signature fourth-generation Western fighter.

(u) (S) In an attempt to improve air interception capabilities, the Chinese may either purchase Russian MiG-31M FOXHOUND interceptors and eventually produce them under license or more Su-27s with production licensing. If the Chinese decide to acquire the MiG-31M/Su-27, they will do so as a result of DESERT STORM.

(U) (S) The Chinese Air Force bomber force is built around the B-6 BADGER and the B-5 BEAGLE. Both aircraft are based on obsolescent airframe designs and use very old avionics. Bomber forces are projected to bear a greater burden than fighter forces in future reductions. By 2013, the Chinese bomber force is projected to be one-third of its current size, from 17 regiments to around 6. Negotiations between Russia and China concerning Tu-22M BACKFIRE sales have reportedly been delayed until 1998 or beyond. The BACKFIRE would give China an improved bombing capability. If the BACKFIRE is procured it will be in small numbers due to the cost.

[REDACTED]

(U) (S) Newer generations of Chinese fighters and bombers have an airborne refueling capability but require airborne tanker assets, which are projected to be in production no later than 1998.

#### b. Chinese Naval Air Force (U)

(U) (S) The mission of the Chinese Naval Air Force is to provide air defense of ports and naval installations as well as air protection for fleet units. Other tasks that fall within its purview include ASUW, maritime reconnaissance, aerial minelaying, ASW operations, ground attack, and limited logistics support. The Naval Air Force would augment the Air Force during hostilities (and vice versa). The Naval Air Force operates a mixture of B-6 BADGER and B-5 BEAGLE bombers; A-5 FANTAN, F-6 FARMER, F-7 FISHBED, F-8-I FINBACK A, and F-8-II FINBACK B fighters and fighter-bombers; SUPER FRELON and DAUPHIN helicopters; and small transports.

(U) (S) Remarks concerning the age and capabilities of Air Force aircraft apply to similar naval aircraft. The newest aircraft in the Chinese Navy inventory include the F-8-II and F-8-I and a limited number of [REDACTED] (C601) ASCM-armed B-6D BADGERS. The Chinese Navy will probably upgrade F-6, F-7, A-5, and B-5 aircraft with the new F-7E, possibly the SUPER 7, and the projected F-8-III and F-10 aircraft when they come on line over the next 20 years.

(U) (S) Two aircraft developmental programs are unique to the Navy: the FB-7 and the Indigenous Carrier Fighter (ICF). The FB-7, also called the B-7, has been under development as a replacement for the B-5 BEAGLE for both antishipping and interdiction. For self-defense, this twin-engine medium bomber

will also carry IR homing missiles. The FB-7 will carry both C801 and improved C802 ASCMs. The FB-7 [REDACTED] should enter trial batch production by 1995. Initial operations are projected by 1998 in the South China Sea area. [REDACTED]

(U)(S) [REDACTED] The Chinese Navy is in the preliminary design stages of an aircraft carrier. [REDACTED]

[REDACTED] The Chinese carrier is projected to be operational by the year 2007, although public statements by Chinese naval leaders have indicated an intention to have two carriers by 2005.

(U)(S) [REDACTED] Internal Chinese debate has centered around whether to acquire foreign carrier-based aircraft (i.e., FLANKER D, FULCRUM D, RFALE, etc.) or to develop indigenous aircraft. [REDACTED]

very controversial in China. Many in the Navy regard such a project as a "black hole" that would consume both R&D and operational funds currently devoted to other priority projects. While the Navy's budget could be substantially increased to account for such an acquisition, carrier funding cannot help but affect the rest of the Navy's programs in the long run. A carrier would be a prestige item, but beyond that would not significantly increase China's power projection capabilities (except against weaker countries in the region). In any case, current and projected geostrategic considerations do not support the need for such capabilities. It would be difficult to justify a carrier as a cost-effective solution to current operational shortfalls. Besides, there are cheaper alternatives, such as using the operational airfield at Woody Island in the Paracels for forward basing of Chinese aircraft.

## 2. WEAPONS (U)

### a. Surface-to-Air Missiles (U)

(U)(S) [REDACTED] Late-1980s acquisition and development of shipborne SAM systems improved the Chinese Navy's air defense capability. A French CROTALE has been retrofitted on LUDA I DD 109, [REDACTED]

(HQ-61)

SAM system has been deployed aboard the new JIANGWEI Class frigates. [REDACTED]

(U)(S) [REDACTED] It should be noted that the subject of an aircraft carrier (and its supporting task force) is still [REDACTED]

(U) ~~S-1~~ Land-Based SAM Systems. China has purchased battalions of Russian SA-10s (probably including technology and related test equipment).

China intends to incorporate the technology acquired with these systems into SAMs being developed indigenously.

these guns are crew-served. Crew-served weapons react to threats more slowly, and their effectiveness is impaired by low-light levels or adverse weather conditions. These problems are especially significant when these guns are used for AAW. Only recently has China made some progress in addressing these shortcomings, although very few ships have any sort of AAW fire control systems and fewer still have radar AA fire control systems.

(U) As China was developing its Navy through the 1950s, it was heavily influenced by and dependent on the Soviet Union for naval gun systems. After the 1960 split from the Soviet Union, China had little naval gun design or manufacturing capability. In order to meet the needs of a growing navy, it resorted to copying and modifying Russian guns in its inventory. Several of these "Chinese" systems were deployed during the 1960s and 1970s. Most of the larger Chinese guns have had some type of modification, while many small-caliber systems are exact copies. Despite China's ability to manufacture naval guns, many of the designs copied were already outdated.

(U) ~~S-1~~ During the 1980s, the Chinese continued to produce and deploy outdated gun systems, and a requirement for Western assistance to improve their naval gun designs was obvious. For example, Chinese ships were still being fitted with completely manual twin 37-mm mounts copied from a Russian system designed in the 1940s. To gain assistance, Chinese delegations visited various Western gun manufacturers.

#### b. Air-to-Air Missiles (U)

(U) ~~S-1~~ Historically, most indigenously designed and built Chinese AAMs have been of lower quality and less capable than comparable U.S., Soviet/Russian, and French AAMs. This is expected to change by the year 2000 as a result of technology acquired from Russia and the West.

(U) ~~S-1~~ Recent developments indicate that the Chinese have been able to adapt some Western technology to their newest systems.

#### c. Naval Guns/AAA (U)

(U) China produces naval guns from 12.7-mm to 130-mm bore that are capable of engaging air targets. Their capability varies greatly, and virtually all of

(u) (2) Based on observed Chinese activity over the past few years, the following general conclusions are still valid:

- China is actively engaged in a fairly extensive R&D program in naval gun/gun mount design.
- China has difficulty with both large- and small-caliber gun designs but has made some progress.
- China is not on a technological par with either the West or Russia in the area of naval guns.
- China is actively seeking outside assistance to improve its naval gun technology.

(u) (8) While having made progress, China will not achieve technological parity with the West within the next 10 to 15 years. Because the Chinese do not have the advantage of a broad naval gun technology base, they will continue to seek outside assistance.

*Urgent*  
As an alternative to producing a 30-mm gatling gun, the Chinese may move to a Western 35-mm system. Oerlikon-Contraves of Switzerland has licensed the China North Industries Corporation (Norinco) to produce the GDF-003 land-based twin 35-mm AA gun and associated ammunition.

(u) (8) Assuming Chinese negotiations with other countries continue and a technology exchange program is established, there will be a more rapid improvement in Chinese naval guns.

*Urgent*  
(8) China's efforts to incorporate Western technologies in any future large caliber gun systems will continue. The newest twin 100-mm is a probable step in that direction, and further efforts on that mount and any follow-ons are expected. In the next 15-20 years, the Chinese will likely deploy a new 100-mm or larger gun system.

(u) (8) The Chinese will continue their efforts to develop automated naval gun systems. A possible candidate is a follow-on to their 57-mm series. The 57-mm Type 66, the basic model, was followed by the more-automated Type 76 system. The Type 76 is already capable of being directed by radar but requires an enlarged automatic feed system and enclosure for improved capability. The Chinese have both mounts on their patrol craft and destroyers. A new twin 57-mm that could be available in the next 5 years will be a fully automatic enclosed mount. This will allow for an all-weather capability and an improved response time against air threats.

(u) (8) A 30-mm replacement for the Type 69 (AK-230 copy) is also possible in the next 5-10 years.

[REDACTED]

**c. Threat to U.S. Naval and Marine Forces (1993-2013) (U)**

(U) Chinese ballistic missiles equipped with inertial guidance systems are not a threat to blue-water maritime operations and probably will not be in the near future. The Chinese ballistic missile threat to ships at sea will remain low until terminal homing sensors are developed and deployed. China will likely continue to rely on its aerodynamic missiles to attack ships at sea or close to shore.

(U) Within the theater, ballistic missiles (primarily short- and medium-range) with nuclear, chemical, conventional unitary, or submunition warheads can threaten airfields, operating bases, ships in port, aircraft on the ground, troops ashore, and military formations. The threat to mobile maritime targets, littoral maritime assets, and troops ashore will increase in the future as SRBM/MRBM inertial guidance accuracies increase, terminal homing sensors are developed and deployed, and targeting, reconnaissance and C3 systems are enhanced.

**F. MERCHANT FLEET (U)**

**1. FLEET STATUS (U)**

(U) (S) The Chinese merchant fleet could provide massive support and troop lift capability in time of emergency. The fleet ranks third in the world in number of ships and eighth in deadweight tonnage (DWT).

(U) (S) In terms of ship age, the Chinese fleet is one of the oldest among the world's major merchant fleets. To renew the fleet, China has vigorously exploited the secondhand market. Acquisition of second-hand tonnage is expected to continue, taking full advantage of opportunities such as the current depressed market in used bulk carriers. Bulk carriers have little or no military utility, however.

(U) (S) A total of 871 known seagoing Chinese cargo ships have a combined lift capacity of about 8,000,000 metric tons. They have a considerable

potential for troplift and logistics support for short-haul and near-sea operations. The 176 tankers could transport about 21,000,000 barrels (U.S.) of petroleum and related products. Almost all are of a size (generally 50,000 DWT or less) suitable for emergency transport duties. It is estimated that more than 90 passenger-carrying ships have at least 30,000 passenger berths in normal trade and could easily carry more than 100,000 troops in emergency service. In addition, there are countless coastal and riverine ferries capable of making short hauls. Traditional junks could further augment this capacity, if needed.

(U) (S) The majority of Chinese merchant ships have moderate operating speeds of 11-17.9 knots; 130 ships have unusually low operating speeds of under 11 knots, but 179 (147 cargo and 32 passenger) have operating speeds of 18 knots or more. China has 133 ships with both heavy-lift booms (40 tons or greater) and a long hatch (15 m or greater), 420 ships with only a long hatch, 248 ships with only a heavy-lift feature, and 43 ships with a single boom capacity in excess of 100 tons. All of these special features greatly enhance the fleet's military support potential. The growing fleet of offshore fishing, research, salvage, and resource exploitation ships are also readily adaptable to military or paramilitary roles.

(U) (S) China's DE YUE and its sister DE DA are two of the largest tugs in the world, with bollard pull of 205 tons each. They are the top ships in a fleet of more than 30 major salvage vessels that China has positioned in the ports of Guangzhou, Shanghai, and Yentai. They would provide a valuable military auxiliary force with little or no modification.

(U) (S) The Space Event Support Ship YUAN WANG 1 and its [REDACTED] are the largest of a fleet of oceangoing research vessels under the Chinese Academy of Science and the State Bureau of Oceanography, which is believed to number more than 60 ships. Some are equipped with towed petroleum exploration seismic arrays, and all could provide communications support (although not secure communications) for command and control of other units.

(U) (S) The oceangoing fleet is augmented by a significant number of ships under 1,000 gross tons (GRT) in coastal trade or ships that are in normal service on the extensive Chinese river system. There are an estimated 300,000-400,000 junks in China, with a combined freight capacity of 3-4 million tons. Many are motorized and of sufficient size to perform duties as military auxiliaries, or to carry troops or materiel.

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(u) China also owns 216 ships of 8,000,000 total DWT under foreign registry, scattered mainly among the Hong Kong, Panamanian, and Liberian flags; however, more than half of these ships are militarily useless bulk carriers. Dry cargo ships are the second largest group among these, and full container ships are the third largest.

## 2. CONTROL (U)

(u) Chinese merchant shipping is controlled by the Ministry of Communications. Daily administrative and operational control is exercised through regional and local shipping companies and their subsidiaries or agents abroad. The largest shipping enterprise is the China Ocean Shipping Company (COSCO), whose overall tonnage accounts for roughly 75% of the total Chinese merchant fleet. COSCO management is decentralized down to the individual port level.

## 3. CREWING AND MANNING (U)

(u) More than 300,000 sailors work in the various sectors of the Chinese maritime industry. A large proportion of them graduated from maritime colleges. Chinese sailors also work on ships not owned by China. According to the Chinese press, more than 20,000 Chinese merchant sailors have worked on foreign ships since 1979, a number that is probably well below the actual figure.

## 4. MARITIME TRADE (U)

(u) Sea-based commerce accounts for over 90% of China's foreign trade. Major export commodities include manufactured goods, consumer goods, agricultural products, coal, oilseeds, rice, corn, oil, and minerals. Major consumers of Chinese exports include the United States, Japan, Russia, Singapore, and Germany. Grain, chemical fertilizers, steel, raw materials, and machinery and other equipment comprise China's primary imports.

(u) General cargo ships (35%), bulk carriers (20%), and full container ships (20%) account for the majority of known commercial shipping to China. The remaining 25% is shared by petroleum and

chemical product tankers and other specialized ships. Major ports-of-call for Chinese-flag shipping are in Japan, Hong Kong, Singapore, Australia, and Malaysia.

## 5. PORTS (U)

(u) During 1991, Chinese ports handled at least 235 million tons of foreign trade cargo: 128.5 million tons for export and 106.5 million for import. Of the nine major commercial ports (Dalian, Shanghai, Tianjin, Qingdao, Guangzhou, Qinhuangdao, Ningbo, Shantou, and Yantai), Dalian is the busiest port engaged in seaborne foreign trade, followed by Shanghai. The government of China is investing heavily to improve the relatively modest level of cargo-handling and intermodal transport capabilities of its major ports.

## 6. SHIPBUILDING (U)

(u) China currently builds ships at 550 shipyards employing 300,000 people. Major shipbuilding facilities are located at Shanghai, Dalian, Guangzhou, and Tianjin. These facilities include 279 graving docks, 37 floating docks, and 64 building berths for ships of 5,000 DWT or more. The largest graving dock can accommodate 70,000-DWT ships; the largest floating dock, 25,000-DWT ships; and the largest building berth, 150,000 DWT ships.

(u) The Chinese are expanding their shipbuilding capacities. A 200,000-ton-class drydock, the largest in China, is scheduled for completion at Dalian in 1993. In addition, construction of another 100,000-ton drydock is expected to be completed in Wenchong by mid-1994. The overall annual output of China's new building industry is expected to exceed 1.5 million DWT by 1995, and possibly reach beyond 3 million DWT by 2000.

## 7. STRATEGY AND DOCTRINE (U)

(u) Key Chinese Navy officials have recognized that intensifying readiness work for mobilizing and requisitioning the merchant marine is an essential component for accomplishing the Navy's missions. To achieve this goal, they have sought to:

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- Establish a sound system to link up mobilization and requisition of the merchant marine in peacetime with the same in wartime;
- Perfect and implement the inactive duty system of merchant marine crew members;
- Draft a scientific program of wartime mobilization and requisition of the merchant marine; and
- Organize the merchant marine for military training.

niche to raise the necessary capital to finance the continued development of its ports, and to build and modernize the merchant fleet.

### b. Ten-Year Developments (U)

(U) (C) China's 5-year (1993-1998) trends and developments will continue. As offshore oil and gas deposits are likely to become fully commercially exploitable, orders for liquefied natural gas/liquefied petroleum gas (LNG/LPG) tankers and petroleum and other lubricant (POL) tankers could skyrocket, with the bulk of the tankers likely to be built domestically. China's shipbuilding technology will enter into high-technology areas (such as LNG/LPG carriers) and high-manpower projects (such as passenger ships). Most of the ships will come from Chinese rather than foreign yards. The ports developed in southern China are expected to reduce Hong Kong's growth in the share of cargo volume or numbers of containers handled.

## 8. OUTLOOK (U)

### a. Five-Year Developments (U)

(U) (C) China will continue its massive investment programs in the maritime transport industry, with heavy emphasis on port development to meet the surge in demand. The makeup of the Chinese merchant fleet will continue to favor containerships as China aspires to modernize its merchant fleet and realize the reduced transportation costs stemming from the container revolution that left China behind in the 1970s and 1980s. General cargo ships will decline in number as more containerships join the fleet. As industrial production increases, the numbers of Chinese-owned bulk carriers and oil and chemical tankers are likely to increase. The percentage of Chinese-owned ships required to meet China's foreign trade requirements will decline as its ports open to foreign-flag shipping. China will take over Hong Kong in 1997 and use Hong Kong's shipping finance

### c. Twenty-Year Developments (U)

(U) (C) China may be a world leader in maritime transportation. Its merchant fleet and maritime industries are expected to rival those of Japan. It is quite possible that the Chinese merchant fleet will be the largest national fleet in the world. Direct trade links with Taiwan will likely have been established. All of China's trade is expected to be two-way, rendering the need for Hong Kong and Taiwan to act as conduits for trade between China and the outside world obsolete.

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